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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,475	07/02/2003	Michael Perkins	55892.8-CIP	4657

71130 7590 08/19/2008

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EXAMINER	
CHORBAJI, MONZER R	

ART UNIT	PAPER NUMBER
1797	

MAIL DATE	DELIVERY MODE
08/19/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/613,475	PERKINS, MICHAEL
	Examiner	Art Unit
	MONZER R. CHORBAJI	1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-10,12,13 and 16-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-10,12,13 and 16-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This final action is in response to the RCE/arguments received on 7/9/08

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coate et al (U.S.P.N. 5,679,257).

Regarding claim 1, Coate discloses a method for disinfecting bodies of wastewater (considered as a fluid) that includes controlling the pH level of the aqueous system to a value between 6-10 (col.4, lines 20-22) then adding a chemical disinfectant

to the system (col.14, lines 45-50). Coates recognizes the relationship between the proper pH value and the optimum removal of contaminants in wastewater (col.4, lines 15-25). Coate teaches that it is known in the art of food processing and wine that sulfur dioxide is used as a disinfecting agent (col.1, lines 66-67 and col.2, lines 1-6), however, such a disinfectant has been used on small scale since large amounts are needed to reach the appropriate level of disinfection. See MPEP 2112 regarding the benefit of increasing the efficiency of the chemical disinfectant by controlling the pH level. Therefore, it would have been obvious to one of ordinary skill in the at the time the invention was made to disinfect wastewater generated by food processing plants by using Coate's method since the main known chemical disinfectant in the food industry has failed to achieve wide-spread use (col.1, lines 66-67 and col.2, lines 1-6).

Regarding claim 3, Coate teaches controlling the pH to a value between 6-10 (col.4, lines 20-25) and in col.18, lines 55-65, Coates teaches that pH values depends on the type of contaminate treated. Some contaminates are better removed at higher pH while others at lower pH values. Based on this teaching, one skilled in the art would recognize that pH values are specific to the optimal removal of a certain type of contaminate and finding the proper pH is a matter of routine experimentation.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coate et al (U.S.P.N. 5,679,257) as applied to claim 1 and further in view of Hurst (U.S.P.N. 5,053,140).

Coate fails to teach using chlorine to chemically disinfect water systems in poultry plants. Hurst teaches adding chlorine to such water (col.7, lines 7-10). Thus, it

would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the method of Coate by adding chlorine as taught by Hurst as an additional chemical disinfectant depending on the contamination level of wastewater (col.4, lines 40-43). It would have been obvious to provide such disinfection of wastewater generated by poultry processing plants in order to greatly reduce the volume of makeup fresh water to the process as taught by Hurst (col.2, lines 30-34).

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holzhauer et al (U.S.P.N. 5,472,619) in view of Coate et al (U.S.P.N. 5,679,257) and further in view of Caracciolo (U.S.P.N. 4,827,727).

Holzhauer teaches a method for chemically disinfecting (for example, peracetic acid is a disinfectant utilized in the composition cited in col.6, lines 60-67) wastewater (considered as a fluid) generated by meatpacking plants (col.1, lines 5-10) that includes controlling the pH of the wastewater (col.4, lines 20-22 and lines 34-36) and treating wastewater from various operations in the plant (col.5, lines 19-21). Holzhauer further employ pH control as a chemical treatment method and depending on its intended use, pH range values vary (col.4, lines 34-41), yet from an exemplary point of view, Holzhauer adjusts pH to 8. Holzhauer fails to teach a pH range value of about 6.5 to about 7 and treating the chilling wastewater of a poultry plant.

Coate teaches controlling the pH value to a range between 6-10 (col.4, lines 19-23) prior to adding disinfecting agent. Further Coates teaches that pH values depends on the type of contaminate treated (col.18, lines 55-65). Some contaminates are better removed at higher pH while others at lower pH values. See MPEP 2112 regarding the

benefit of increasing the efficiency of the chemical disinfectant by controlling the pH level. In addition, note that both the instant claims and Coate have the same pH range value (col.4, lines 20-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further adjust Holzhauer variable pH values to pH values that falls between 6 to 10 as taught by Coate since such a range allows for optimum removal of contaminants (Coate, col.4, lines 18-20).

Holzhauer and Coate fail to teach treating the chilling wastewater of a poultry plant. Caracciolo teaches cleaning and filtering ozonated water by recovering a portion of the chiller water (figure 1:10), filtering organic solids (figure 1:13, 14 and 15) and returning the filtered water to the chiller (figure 1:19). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the method Holzhauer by adding chilling water disinfection step as taught by Caracciolo in order to reduce the amount of fresh water added to the plant (Caracciolo, col.2, lines 7-9).

7. Claims 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holzhauer et al (U.S.P.N. 5,472,619) in view of Coate et al (U.S.P.N. 5,679,257) and further in view of Hurst (U.S.P.N. 5,053,140).

Regarding claim 6, Holzhauer teaches a method for chemically disinfecting (for example, peracetic acid is a disinfectant utilized in the composition cited in col.6, lines 60-67) wastewater (considered as a fluid or processing fluid) generated by meat-packing plants (col.1, lines 5-10) that includes adding a chemical disinfectant (col.6, lines 58-67), controlling the pH of the wastewater (col.6, lines 60-62) and treating

wastewater from various operations in the plant (col.5, lines 19-21). As to the limitation that the controlled pH level results in optimizing the chemical disinfectant, see MPEP 2112, II. Holzhauer fails to teach controlling the pH level of the disinfected processing fluid to a value between 6 and 8 and also fails to teach chemically disinfecting wastewater generated by poultry plants.

Coate discloses a method for disinfecting bodies of wastewater (considered as a fluid) that includes controlling the pH level of the aqueous system to a value between 6-10 (col.4, lines 20-22) in order to allow for optimum removal of contaminants (col.4, lines 18-19). In col.18, lines 55-65, Coates teaches that pH values depend on the type of contaminate treated. Some contaminates are better removed at higher pH while others at lower pH values. Based on this teaching, one skilled in the art would recognize that pH values are specific to the optimal removal of a certain type of contaminate and finding the proper pH is a matter of routine experimentation. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method in Holzhauer with the pH range of 6-10 in order to allow for optimum removal of contaminants as explained by Coate (col.4, lines 18-19).

Holzhauer and Coate fail to teach chemically disinfecting wastewater generated by poultry plants. Hurst teaches disinfecting chilling water in poultry plant (col.1, lines 7-14 and col.5, lines 38-42) where the steps of scalding, picking, eviscerating, washing and rinsing are inherent steps of such process. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Holzhauer/Coate modified method to disinfect wastewaters generated at various

processing steps in a poultry plant in order to greatly reduce the volume of makeup fresh water to the process as taught by Hurst resulting in reduction in operating costs (col.2, lines 30-34).

Regarding claims 7 and 9-10, Holzhauer teaches the following: a method for disinfecting wastewater generated by meat-packing plants (col.1, lines 5-10), controlling the pH of the wastewater (col.6, lines 60-62) and treating wastewater from various operations in the plant (col.5, lines 19-21). Holzhauer/coate4 fail to teach disinfecting wastewater generated by poultry plants, use of the chlorine or ozone and monitoring and regulating the addition of the disinfectant. Hurst teaches the following: disinfecting wastewater generated by chilling chicken carcasses (col.6, lines 30-40) where the step of eviscerating is an inherent step of such process, use of the chlorine or ozone (figure 1:10 and 7) and monitoring and regulating the addition of the disinfectant (col.7, lines 18-33). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Holzhauer/Coate modified method to disinfect all wastewaters generated at various processing steps in a poultry plant including the eviscerating step in order to greatly reduce the volume of makeup fresh water to the process as taught by Hurst resulting in reduction in operating costs (col.2, lines 30-34).

Regarding claim 8, Holzhauer teaches to initially add the disinfectant then to control the pH level (col.6, lines 58-61).

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Caracciolo (U.S.P.N. 4,827,727) in view of Coate et al (U.S.P.N. 5,679,257).

Regarding claim 12, Caracciolo teaches a method (col.1, lines 4-9) for sterilizing poultry with ozonated water in a chiller (figure 1:1) that includes the following: recovering a portion of the chiller water (figure 1:10), adding a disinfectant to the chiller water (figure 1:3 and 18), monitoring and regulating the step of disinfectant addition (col.2, lines 37-48), filtering organic solids (figure 1:13, 14 and 15) and returning the filtered water to the chiller (figure 1:19). Caracciolo fails to teach employing pH controlling/adjustment steps.

Coate discloses a method for chemically disinfecting bodies of wastewater by ozone that includes controlling and adjusting the pH level of the aqueous system to a value between 6-10 (col.4, lines 20-22) in order to allow for optimum removal of contaminants (col.4, lines 18-19). In col.18, lines 55-65, Coates teaches that pH values depend on the type of contaminate treated. Some contaminates are better removed at higher pH while others at lower pH values. Based on this teaching, one skilled in the art would recognize that pH values are specific to the optimal removal of a certain type of contaminate and finding the proper pH is a matter of routine experimentation. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Caracciolo method by adding pH adjustment step as taught by Coate since when pH is maintained within a certain range, optimum removal of contaminants in fluids is accomplished (Coate, col.4, lines 18-23).

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Caracciolo (U.S.P.N. 4,827,727) in view of Coate et al (U.S.P.N. 5,679,257) as applied to claim 12 and further in view of Hibbard et al (U.S.P.N. 5,514,282).

Caracciolo teaches a method (col.1, lines 4-9) for sterilizing poultry with ozonated water in a chiller (figure 1:1) that includes screening the recovered water (figure 1:12) and fine filtering the recovered water (figure 1:15). However, both Caracciolo and Coate fail to teach floating the recovered water in a floatation unit. Hibbard teaches the use of a floatation unit (figure: 12). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Caracciolo method by including a floatation unit as taught by Hibbard since the use of such a unit has unexpectedly been found to effect a high removal of phosphorous from the wastewater feed stream (col.4, lines 43-45).

10. Claims 16-17, 21 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holzhauer et al (U.S.P.N. 5,472,619) in view of Coate et al (U.S.P.N. 5,679,257) and further in view of Mostoller (U.S.P.N. 5,882,253).

Regarding claims 16 and 21, Holzhauer teaches a method for disinfecting wastewater generated by meat-packing plants (col.1, lines 5-10) that includes adding a disinfectant (col.6, lines 58-60) to a recovered process water (col.5, lines 19-21), controlling the pH of the wastewater (col.6, lines 60-62), reintroducing the treated process water (col.4, lines 31-32) and treating wastewater from various operations in the plant (col.5, lines 19-21). Holzhauer fails to teach controlling the pH level of the disinfected processing fluid to a value between 6 and 8 and also fails to teach disinfecting wastewater generated by poultry plants. Coate discloses a method for disinfecting bodies of wastewater (considered as a fluid) that includes controlling the pH level of the aqueous system to a value between 6-10 (col.4, lines 20-22) in order to

allow for optimum removal of contaminants (col.4, lines 18-19). In col.18, lines 55-65, Coates teaches that pH values depend on the type of contaminate treated. Some contaminates are better removed at higher pH while others at lower pH values. Based on this teaching, one skilled in the art would recognize that pH values are specific to the optimal removal of a certain type of contaminate and finding the proper pH is a matter of routine experimentation. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method in Holzhauer with the pH range of 6-10 in order to allow for optimum removal of contaminants as explained by Coate (col.4, lines 18-19).

Holzhauer and Coate fail to teach disinfecting wastewater generated by poultry plants. Mostoller teaches that the steps of slaughtering, scalding, defeathering, and eviscerating and the like are known in the art of processing chicken (col.4, lines 20-23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Holzhauer/Coate modified method to disinfect all wastewaters generated at various processing steps in a poultry plant including heated water used in, for example, scalding step, as taught by Mostoller in order to minimize the risk of pathogen contamination to humans (Mostoller, col.1, lines 5-10).

Regarding claims 17 and 26, Holzhauer and Coate fail to teach processing poultry. Mostoller teaches that the step of scalding is known in the art of processing chicken (col.4, lines 20-23) and recognizes that the eviscerating step causes serious contamination problem in a continuous on-line poultry processing plant (col.1, lines 5-13 and col.2, lines 34-49). It would have been obvious to one of ordinary skill in the art at

the time the invention was made to further modify Holzhauer/Coate modified method to disinfect all wastewaters generated at various processing steps in a poultry plant, specifically the eviscerating and scalding steps, as taught by Mostoller in order to minimize the risk of pathogen contamination to humans (Mostoller, col.1, lines 5-10).

11. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holzhauer et al (U.S.P.N. 5,472,619) in view of in view of Coate et al (U.S.P.N. 5,679,257) and Mostoller (U.S.P.N. 5,882,253) as applied to claim16, and further in view of Hurst (U.S.P.N. 5,053,140).

Regarding claims 18-20, Holzhauer, Coate, and Mostoller fail to teach the use ozone and chlorine in treating recovered water in a poultry processing plant. Hurst teaches injecting ozone and chlorine (figure 1:10 and 7) into recovered water from the chiller step (col.5, lines 38-40) in a poultry processing plant. It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Holzhauer/Coate/Mostoller modified method by additionally including ozone and chlorine since ozone oxidizes oxidizable material in the wastewater and kills microorganisms therein (Hurst, col.6, lines 60-61) and chlorine provides a furthering assuring disinfecting step in case the wastewater is heavily contaminated (Hurst, col.4, lines 40-43).

12. Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caracciolo (U.S.P.N. 4,827,727) in view of Coate et al (U.S.P.N. 5,679,257).

Regarding claim 22, Caracciolo teaches a method (col.1, lines 4-9) for sterilizing poultry with ozonated water in a chiller (figure 1:1) that includes the following:

recovering a portion of the chiller water (figure 1:10), filtering organic solids (figure 1:13, 14 and 15) and returning the filtered water to the chiller (figure 1:19). Caracciolo fails to teach controlling the pH of the disinfected filtered water between 6 and 8. Coate discloses a method for disinfecting bodies of wastewater (considered as a fluid) that includes controlling the pH level of the aqueous system to a value between 6-10 (col.4, lines 20-22) in order to allow for optimum removal of contaminants (col.4, lines 18-19). In col.18, lines 55-65, Coates teaches that pH values depend on the type of contaminate treated. Some contaminates are better removed at higher pH while others at lower pH values. Based on this teaching, one skilled in the art would recognize that pH values are specific to the optimal removal of a certain type of contaminate and finding the proper pH is a matter of routine experimentation. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method in Caracciolo with the pH range of 6-10 in order to allow for optimum removal of contaminants as explained by Coate (col.4, lines 18-19).

Regarding claims 23-25, Caracciolo uses multiple filtering steps (figure: 13, 14 and 15) that necessarily results in reducing the chemical oxidation demand, which leads to improving the efficacy of the disinfectant, and the filterable organics are fat and other bulky carcass debris (col.3, lines 16-18).

Response to Argument

13. Applicant's arguments filed on 7/9/08 have been fully considered but they are not persuasive.

On page 7 of the Remarks section, Applicant argues that Coate discloses a method of contaminant removal without the addition of chemicals other than acid or base to promote flocculation in the waste water.

The citation the Applicant refers the examiner to evaluate refers to the use of chemicals and not the use of disinfecting agents. Coates in the same column defines those chemicals as active chemical flocculants, coagulants or polymers. However, the examiner refers Applicant to the numerous citations within the Coates Disclosure for providing ozone for the removal of contaminants. For example, see col.4, lines 43-44, or col.15, lines 14-17. Ozone is a chemical disinfection agent.

On page 8 of the Remarks section, Applicant argues that the pH adjust in Coate is for contaminant removal and not for causing the chemical disinfection agent to become more efficacious.

In column 4, lines 18-22, Coate describes that the pH is adjusted and maintained within a certain range in order to allow optimum removal of the contaminants and since the chemical disinfectant in Coate is ozone, which remove contaminants in the fluid, then one of ordinary skill in the art would recognize that adjusting the pH in Coate enables ozone (the chemical disinfection agent) to become more efficacious. See column 18, lines 58-65; where Coate again describes choosing pH values so that optimal removal of the contaminants is achieved, meaning ozone is highly efficient in removing the contaminants. It is noted that on page 8, lines 17-18, that Applicant admits that Coate provides ozone for the removal of contaminant. In addition, the subject matter of the instant claims with respect to adjusting the pH of the treated fluid so that

the function of the disinfecting agent is optimized is inherent in the Coate reference. See MPEP 2112, II regarding that an inherent feature need not be recognized at the time of the invention.

On page 9 of the Remarks section, Applicant argues that Coate teaches away from using chlorine and provides a teaching in the Coate reference.

In considering the cited teaching in col.1, lines 53-64 of Coate, Coate does not teach against using chlorine. Coate teaches that chlorine if properly used can be used and with such proper process, its usage does meet federal water discharge standards. One of ordinary skill in the art would recognize that if chlorine is the choice of disinfecting water, then certain procedures must be followed in order to meet federal regulation requirements. Coate discloses a process for treating waste waters from industrial processes with ozone to remove contaminants. It is known to treat the waste water from food process such as those where the foodstuffs is poultry. Hurst is an example in the art where waste water from food processes including poultry is treated using ozone to remove contaminants. Hurst also discloses that chlorine is also added to the treated wastewater prior to the completion of the process. It is notoriously well known in the art that the addition of chlorine to water provides disinfection to water (see recognition in Coate). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the treatment process in Coate in the treatment of wastewater from a food processing plant where the food is poultry as such treatment is known and exemplified by Hurst and to further add chlorine to the treated wastewater in the process of Coate as such is considered a well known disinfectant and further

exemplified by Hurst in combination with an ozone treatment of wastewater. It is further noted that one of ordinary skill in the art would readily recognize that the control of the pH in the process of Coate would also improve the efficacy of the chlorine as Coate teaches optimizing the pH level in order to optimize the removal of contaminants in the wastewater.

On page 11 of the Remarks section, Applicant argues that Holzhauer is concerned with adjusting the pH to promote flocculation and not to optimize a disinfectant.

Holzhauer uses peracetic acid as the disinfecting agent and further teaches that one of the benefits of controlling pH within a certain range leads to enhancing kill rates (col.4, lines 32-36) where one of ordinary skill in the art would recognize that since peracetic acid is the disinfecting agent, then adjusting the pH would optimize the effect of the disinfecting agent by enhancing the kill rates of pathogens, therefore, making the disinfecting agent (peracetic acid) more efficient. In addition, the subject matter of the instant claims with respect to adjusting the pH of the treated fluid so that the function of the disinfecting agent is optimized is inherent in the Holzhauer reference. See MPEP 2112, II regarding that an inherent feature need not be recognized at the time of the invention.

On page 13 of the Remarks section, Applicant argues that Holzhauer, Hurst or Coate alone or in combination do not suggest adjusting the pH of wastewater between 6-8 to improve the effectiveness of a disinfectant.

Arguments regarding adjusting the pH of the wastewater to improve the effectiveness of the disinfectant have bee previously addressed above regarding the Coate and the Holzhauer references. Holzhauer adjusts the pH to 8 as described in col.6, lines 60-61, while Coate teaches controlling the pH to a value of 6 (col.4, lines 20-25) and in col.18, lines 55-65, Coates teaches that pH values depends on the type of contaminate treated. Some contaminates are better removed at higher pH while others at lower pH values. Then, based on this teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Holzhauer method by choosing a pH value between 6 and 8 since at such a range optimum removal of contaminants is achieved as taught by Coate (col.18, lines 58-61).

On page 14 of the Remarks section, Applicant argues that Caracciolo, or Coate alone or in combination do not suggest adding a disinfectant to the chiller water; controlling the pH level of the chiller water; and monitoring and regulating the steps of adding a disinfectant and controlling the pH level of the chiller water.

The examiner refers the Applicant to pages 7-8 of the final action dated 05/17/07 and further asserts that Caracciolo teaches adding a disinfectant to the chiller water (figure 1:3 and 18), monitoring and regulating the step of disinfectant addition (col.2, lines 37-48). Caracciolo does not specifically teach employing pH controlling/adjustment steps. Coate discloses controlling and adjusting the pH level of the aqueous system to a specific value (for example, see col.14, lines 43-45). Coate teaches that adjusting pH results in generating solids (col.8, lines 18-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify

Caracciolo method by adding pH adjustment step as taught by Coate since when pH is maintained within a certain range, optimum removal of contaminants in fluids is accomplished (Coate, col.4, lines 18-23).

On page 16 of the Remarks section, Applicant argues that neither Caracciolo, Coate nor Hibbard alone or in combination suggest recovering a portion of chiller water used in the chilling process, that none of the references alone or in combination teach filtering organic solids from recovered poultry chiller water wherein at least a portion of the solids are the result of precipitation of soluble material through pH adjustment of the chiller water.

The examiner refers the Applicant to pages 8-9 of the final action dated 05/17/07 and further asserts that Caracciolo teaches recovering the chiller water (figure 1:10 and 12); screening the recovered water (figure 1:12) and fine filtering the recovered water (figure 1:15). Both Caracciolo and Coate do not specifically teach floating the recovered water in a floatation unit. Hibbard teaches the use of a floatation unit (figure: 12). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Caracciolo method by including a floatation unit as taught by Hibbard since the use of such a unit has unexpectedly been found to effect a high removal of phosphorous from the wastewater. It is noted that dependent claim 13, does not recite the limitation of “recovering a portion of chiller water used in the chilling process” nor does it recites the limitation of “wherein at least a portion of the solids are the result of precipitation of soluble material through pH adjustment of the chiller water”. Furthermore, Coate teaches that adjusting the pH level results in generating solids

(col.8, lines 18-22). This limitation was addressed earlier with regard to independent claim 12 (See pages 7-8 of the final action dated 05/17/07).

On page 16 of the Remarks section, Applicant argues that the combination of Holzhauer and Mostoller do not arrive at a process of recovering water used during at least one of the poultry processing steps; treating the recovered water with a disinfectant and controlling pH of the recovered water; and reintroducing the treated water into at least one heated processing step which uses heated water, whereby the combination of the treated water and the heated water reduces the level of microorganisms within the poultry.

The examiner refers the Applicant to pages 9-10 of the final action dated 05/17/07 and further asserts that Holzhauer recovers waste water generated from meat-packing plants (col.5, lines 19-21 and figure 1:20); disinfects (col.6, lines 58-60) the recovered process water (col.5, lines 19-21); controls the pH of the recovered wastewater (col.6, lines 60-62); reintroduces the treated process water (col.4, lines 31-32); and treats wastewater generated from various operations in the plant (col.5, lines 19-21). Holzhauer does not specifically teach disinfecting wastewater generated by poultry plants. Mostoller teaches that the steps of slaughtering, scalding, defeathering, and eviscerating and the like are known in the art of processing chicken (col.4, lines 20-23). As a result, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Holzhauer method to disinfect all wastewaters generated at various processing steps in a poultry plant including heated water used in, for example, scalding step, as taught by Mostoller in order to minimize the risk of

pathogen contamination to humans (Mostoller, col.1, lines 5-10). As to the limitation that the combination of the treated water and the heated water reduces the level of microorganisms within the poultry, Mostoller teaches that typical treatments in a poultry plant includes a scalding step (col.4, line 21) where hot water washes chicken carcasses and also includes a recirculation unit (col.3, lines 47-48). Furthermore, Holzhauer teaches the provision of having recycled streams (col.4, line 32). Then, one of ordinary skill in the art would recognize that providing the steps of poultry processing of Mostoller to the waste water disinfection method of Holzhauer results in having poultry process water disinfected by the Holzhauer recycled back into heated water used for the scalding step in the Mostoller process. As to the limitation that the combination of the treated water and the heated water reduces the level of microorganisms within the poultry, the combination of Holzhauer and Mostoller contains this subject matter (MPEP 2112, II).

On page 19 of the Remarks section, Applicant argues that neither Holzhauer or Caracciolo alone or in combination suggest recovering water used during the poultry processing chilling step; removing filterable organics from the recovered water; reacting the filtered water with a disinfectant and controlling pH of the disinfected filtered water; and reintroducing the disinfected filtered water into the chiller tank.

The examiner refers the Applicant to page 11of the final action dated 05/17/07 and further asserts that Caracciolo teaches recovering used chilled water (figure 1:10); filtering organic solids (figure 1:13, 14 and 15) from the recovered water; reacting the filtered water with a disinfectant (figure 1:3, 5, 2 and 18); and returning the disinfected

filtered water to the chiller (figure 1:17, 18 and19). Caracciolo does not specifically teach controlling the pH of the disinfected filtered water. Holzhauer teaches controlling the pH level of the disinfected wastewater (col.4, lines 28-30, lines 33-35, and col.6, lines 60-62). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Caracciolo method by including a pH level controlling step as taught by Holzhauer in order to enhance kill rates of microorganisms in wastewaters (Holzhauer, col.4, lines 35-42).

Conclusion

14. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filling of a request for continued examination and the submission under 37 CFR 1.114. See MPEP 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

15. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date

of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONZER R. CHORBAJI whose telephone number is (571) 272-1271. The examiner can normally be reached on M-F 9:00-5:30.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. R. C./

/Jill Warden/
Supervisory Patent Examiner, Art Unit 1797